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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/511,624 | 10/18/2004 | Idriss El Hafidi | HY 1102.02 US | 4079 |
| 22887 | 7590 | 10/03/2006 | EXAMINER | |
| DISCOVISION ASSOCIATES 2265 E. 220TH STREET LONG BEACH, CA 90810 | | | ASSAF, FAYEZ G | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2872 | |

DATE MAILED: 10/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/511,624

Applicant(s)

EL HAFIDI ET AL.

Examiner

Fayez G. Assaf

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/26/06; 7/31/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) 8-24, 28-30 and 39-46 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26, 27, 31, 48-51 and 57-61 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 32-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>7/31/2006</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Listing of Claims

Claims 39-46 are not included in the last version submitted 7/26/2006.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 and 32-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Horimai (US 2003/0063342 A1).

Horimai discloses an apparatus comprising: a first diffractive holographic data storage device having a first set of reflective multiplexed holograms stored thereon (Hor, first 224 of Fig. 45); a second diffractive holographic data storage

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device having a second set of reflective multiplexed holograms stored thereon (Hor, second 224 of Fig. 45); and an opaque layer disposed between and attached to one side of the first and second diffractive holographic data storage devices (Hor, 221 of Fig. 45).

Claims 32 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Bahns (US 5,946,286).

Bahns discloses an apparatus comprising: a reflective diffractive holographic data storage device having a first set of holograms stored thereon (upper grating of Fig. 2); and a transmissive diffractive holographic data storage device having a second set of holograms stored thereon (44 of Fig. 2), the transmissive and reflective diffractive holographic data storage devices being attached together

It is noted that the reflective grating is reflective with regard to the R2 beam and the transmissive grating is transmissive with regard to the R1 beam (line 40 to line 55 of Col. 7).

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horimai.

Horimai discloses the claimed invention except for the organic material being a polypeptide.

However, The selection of a known material based on its suitability for its intended use supports a prima facie obviousness determination.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize polypeptide holograms, since it have been held to be within the ordinary skill of worker in the art to select a known material on the basis of its suitability for the intended use. One would have been motivated to use such material so as to write the holograms in a time efficient manner and achieve high diffraction efficiency.

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Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S.
327, 65 USPQ 297 (1945).

Response to Arguments

Applicant's arguments filed 7/26/2006 have been fully considered but they are not persuasive.

In essence, Applicant argues that the reflecting substrate in Horimai and the data layer in Bahns are not opaque layers. Furthermore, Applicant argues that opaque, by definition, means not reflecting light. The Examiner respectfully disagrees, because opaque means: *blocking the passage of radiant energy and esp. light*. (See Merriam Webster's Collegiate Dictionary, Tenth Edition.) Additionally, it is well known that optical materials can be opaque or transparent depending on the wavelength of light.

Allowable Subject Matter

Claims 26, 27, 31, 48-51 and 57-61 are allowable for the reasons set forth in the Office action mailed 4/27/2006.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

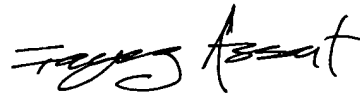
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fayez G. Assaf whose telephone number is (571) 272-2307. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval

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(PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Fayez G. Assaf
Primary Examiner
Art Unit 2872

9/28/2006